

SECTION 10 81 13
BIRD CONTROL DEVICES

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Bird netting system.
- B. Wire mesh barriers.
- C. Bird wire systems.
- D. Bird spike strips.
- E. Bird spiders.
- F. Bird slopes.

1.02 RELATED SECTIONS

- A. Section 01 33 00, Submittal Procedures
- B. Section 01 33 23, Shop Drawings, Product Data, and Samples
- C. Section 01 43 00, Quality Assurance
- D. Section 01 74 14, Cleaning
- E. Section 07 60 00, Flashing and Sheet Metal
- F. Section 10 22 13, Wire Mesh Partitions

1.03 MEASUREMENT AND PAYMENT

- A. General: Bird Control Devices will not be measured separately for payment but will be paid for as part of the Contract lump sum price for Architectural Work.

1.04 SUBMITTALS

- A. General: Refer to Section 01 33 00, Submittal Procedures, and Section 01 33 23, Shop Drawings, Product Data, and Samples, for submittal requirements and procedures.
- B. Shop Drawings: Submit detailed Shop Drawings of the bird control devices including installation, hardware, and accessories.
- C. Product Data:
 - 1. Manufacturer's product data and installation instructions.

2. Catalog cuts, marked to indicate applicable requirements.
- D. Samples: Submit one sample for each product used. Refer to 01 33 23, Shop Drawings, Product Data, and Samples for other sample requirements.
 1. Bird control strips: minimum 6 inch sample.
 2. Bird wire system: one base with posts and attached wire.
 3. Bird netting system: minimum 4 foot square sample with edge construction and each hardware item.
 4. Wire mesh barrier: minimum 6 inch square sample.
 5. Bird spider: one assembly.
 6. Bird slope: 6 inch section.

1.05 QUALITY ASSURANCE

- A. Refer to Contract Specifications Section 01 43 00, Quality Assurance.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in original unopened packaging with legible manufacturer's identification.
- B. Store delivered products in clean, safe, dry area.

1.07 PROJECT CONDITIONS

- A. Coordination: Coordinate installation with other work, existing conditions, and within on-site tolerances. Provide hardware and accessories as necessary for the proper installation and function.
- B. Visit site and field measure prior to fabrication and delivery of materials.

1.08 WARRANTY

- A. Provide manufacturer's guarantee as follows:
 - 1. Bird netting system: 10 years
 - 2. Bird wire system: Five years
 - 3. Bird spike strips: Five years

PART 2 – PRODUCTS

2.01 BIRD NETTING SYSTEM

- A. Materials: 3/4 inch heavy duty polyethylene bird netting with a zipper, flame resistant to 270 degrees Fahrenheit.
- B. Hardware: 3/32 inch stainless steel wire perimeter hung from medium size stainless steel net bolts, 1 inch embedment. Structural steel studs shall be "no punch", powder-coated black finish, #10 self-driving screws with black painted finish. Do not use galvanized hardware. Provide other hardware per manufacturer's recommendation including but not limited to turnbuckles, I-bolts, hog rings, corner, attachments, intermediate attachment, and ferrules.

2.02 WIRE MESH BARRIERS

- A. Material: 1 inch square mesh, 12 gauge welded wire mesh with PVC coating.
- B. Color: as selected by the Engineer.
- C. Hardware: as recommended by manufacturer.

2.03 BIRD WIRE SYSTEM

- A. Materials: stainless steel #316 wire with spring connections to posts in continuous parallel rows at 3 inch on center for full length of surface.
- B. Posts: stainless steel single eye. Connection shall be as indicated on Contract Drawings.

2.04 BIRD SPIKE STRIPS

- A. Material: Ultraviolet (UV) stabilized polycarbonate, heat and weather resistant from -200 to +300 degrees Fahrenheit, one piece construction, minimum 3 inch width, minimum 4 inch height, minimum 40 spikes per foot in linear array with no gap center spike, non-staggered design, and flexible for wrapping around rounded surface (e.g. light fixture).
- B. Mounting: adhesive as recommended by manufacturer.

- C. Color: as selected by the Engineer.

2.05 BIRD SPIDER

- A. Material: stainless steel arms attached to a UV protected polycarbonate base. Each arm shall be fitted with polycarbonate tip to assist in movement and prevent scuffing.
- B. Size: as selected by the Engineer.
- C. Mounting: adhesive as recommended by manufacturer.

2.06 BIRD SLOPE

- A. Material: Powder-coated sheet metal 60 degree slope. Bent cap projections and ledges. Thickness indicated in Contract Drawings. Refer to Contract Specifications 07 60 00, Flashing and Sheet Metal.
- B. Color: as selected by the Engineer.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine the area and delivered products and verify that:
 - 1. Dimensions are correct to the delivered products.
 - 2. Adjacent or adjoining surfaces are clean, dry, reasonably smooth, and free from defects.
 - 3. There is absence of other conditions that will adversely affect installation.
- B. Do not start work until unsatisfactory conditions have been corrected.

3.02 SURFACE PREPARATION

- A. Prior to installation, clear surface of bird dropping, nesting material or other debris in accordance to Section 01 74 14, Cleaning. Remove or repair articles that may damage after installation, including overhanging foliage, bursh, and loose parts of the structure. Use appropriate disinfectant to prepare surface.

3.03 INSTALLATION

- A. Install bird control devices in accordance with manufacturer's recommendation and reviewed Shop Drawings.
- B. Bird Control Strip: Install bird control where noted, leaving no gaps for perching.

- C. Bird Spider: Install bird spider with adhesive to the surface in accordance with manufacturer's instructions.
- D. Bird Wire
 - 1. Install bird wire control system where indicated on the Contract Drawings, leaving no gaps for perching.
 - 2. Number of rows as determined by manufacturer and based on project conditions.
 - 3. Install wire taut.
- E. Bird Netting:
 - 1. Install bird netting control system on inside faces to minimize public view where practicable.
 - 2. Install netting taut.
 - 3. Install intermediate attachments no more than 2 feet apart.
 - 4. Use mechanical type attachments or fasteners. Do not use adhesive or Velcro type attachments or fasteners.
- F. Wire Mesh Barriers: Install in accordance to Contract Specifications 10 22 13, Wire Mesh Partitions.
- G. Bird Slope: Install in accordance to Contract Specifications 07 60 00, Flashing and Sheet Metal.

3.04 PROTECTION

- A. Protect work from damage to surface, profile and shape.

END OF SECTION 10 81 13